

Title (en)

CHARGING SYSTEM, CHARGING METHOD, AND POWER ADAPTER FOR TERMINAL

Title (de)

LADESYSTEM, LADEVERFAHREN UND STROMADAPTER FÜR ENDGERÄT

Title (fr)

SYSTÈME DE CHARGE, PROCÉDÉ DE CHARGE, ET ADAPTATEUR D'ALIMENTATION POUR TERMINAL

Publication

**EP 3273572 A1 20180124 (EN)**

Application

**EP 16889011 A 20160726**

Priority

- CN 2016073679 W 20160205
- CN 2016091759 W 20160726

Abstract (en)

A device charging system and a device charging method and a power adapter are provided. The device charging system includes a power adapter and a device. The power adapter includes a first rectification unit, a switch unit, a transformer, a second rectification unit, a first charging interface, a sampling unit, and a control unit. The control unit is configured to output a control signal to the switch unit, and adjust a duty ratio of the control signal based on a voltage sampling value and/or current sampling value sampled by the sampling unit, whereby a voltage of a third pulsating waveform meets the charging requirements. The device includes a second charging interface and a battery. The second charging interface is coupled with the battery. When the second charging interface is coupled to the first charging interface, the second charging interface applies the voltage of the third pulsating waveform to the battery, whereby the voltage of the pulsating waveform output from the power adapter can be directly applied to the battery, which can achieve miniaturization and reduce the cost of the power adapter and improve the battery life.

IPC 8 full level

**H02J 7/06** (2006.01)

CPC (source: CN EP KR US)

**G01R 31/2874** (2013.01 - US); **H01F 27/425** (2013.01 - US); **H01M 10/0525** (2013.01 - US); **H02H 3/202** (2013.01 - CN); **H02H 7/18** (2013.01 - CN); **H02J 7/00** (2013.01 - US); **H02J 7/00034** (2020.01 - KR); **H02J 7/00036** (2020.01 - US); **H02J 7/00043** (2020.01 - US); **H02J 7/0013** (2013.01 - US); **H02J 7/0029** (2013.01 - CN); **H02J 7/0031** (2013.01 - CN); **H02J 7/0042** (2013.01 - US); **H02J 7/0044** (2013.01 - US); **H02J 7/0045** (2013.01 - US); **H02J 7/0047** (2013.01 - EP KR US); **H02J 7/007** (2013.01 - CN); **H02J 7/0071** (2020.01 - CN EP KR US); **H02J 7/00711** (2020.01 - CN EP KR US); **H02J 7/00712** (2020.01 - CN US); **H02J 7/00714** (2020.01 - CN); **H02J 7/007182** (2020.01 - CN EP KR US); **H02J 7/007188** (2020.01 - CN); **H02J 7/007192** (2020.01 - CN US); **H02J 7/02** (2013.01 - CN EP KR US); **H02J 7/04** (2013.01 - CN EP US); **H02J 7/06** (2013.01 - CN EP US); **H02J 7/1492** (2013.01 - US); **H02J 7/2434** (2020.01 - US); **H02M 1/08** (2013.01 - CN US); **H02M 3/156** (2013.01 - US); **H02M 3/33507** (2013.01 - CN US); **H02M 3/33515** (2013.01 - CN US); **H02M 3/33523** (2013.01 - CN US); **H02M 3/3353** (2013.01 - CN); **H02M 3/33546** (2013.01 - CN US); **H02M 3/33569** (2013.01 - CN); **H02M 3/33576** (2013.01 - CN); **H02M 3/33592** (2013.01 - CN); **H02M 7/06** (2013.01 - US); **H02M 7/217** (2013.01 - CN); **H04M 19/00** (2013.01 - EP KR US); **H01F 2027/408** (2013.01 - US); **H01M 10/4257** (2013.01 - US); **H02J 7/00034** (2020.01 - EP US); **H02J 7/0048** (2020.01 - US); **H02J 7/0049** (2020.01 - EP US); **H02J 7/00714** (2020.01 - EP KR US); **H02J 2207/10** (2020.01 - CN US); **H02J 2207/20** (2020.01 - CN EP KR US); **H02M 1/0009** (2021.05 - US); **H02M 1/0048** (2021.05 - US); **H02M 5/458** (2013.01 - US); **Y02D 30/70** (2020.08 - EP KR US); **Y02E 60/10** (2013.01 - KR)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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